NUS CORPORATION
999 WEST VALLEY ROAD
WAYNE, PENNSYLVANIA 19087
215-687-9510

~~8908-08-57~~
PLA 8906-08-57

ORIGINAL
(Red)

CONFIDENTIAL

March 30, 1990
R-585-12-9-5
68-01-7346

Mr. Gregory Ham
U.S. Environmental Protection Agency
841 Chestnut Building
Ninth and Chestnut Streets
Philadelphia, Pennsylvania 19107

Subject: Final Report
TDD No. F3-8906-08
EPA No. PA-272
Plasti-Seal Corporation
Montgomery County, Pennsylvania

Dear Mr. Ham:

Submitted herewith is the final Site Inspection report for the subject site. The contents of the report are based on an evaluation of information contained in the site files provided, on the results of a review of regional and local hydrogeologic literature, and on data collected during a field evaluation performed in July 1989. Based on this review, the following is offered for EPA's consideration:

- It is recommended that no further CERCLA action be performed at the site. A rough Hazard Ranking System PREscore and PROscore of 7.01 were obtained for the site. This low score is due to the adequate containment of waste at the site, as well as the lack of an observed release from the site.

- An industrial survey conducted by EPA in 1980, to determine the source of trichloroethene (TCE) contamination in Upper Southampton's municipal wells, indicated that TCE was utilized and reportedly spilled at a Plasti-Seal facility located on Industrial Highway, 1.5 miles east of the site. Plasti-Seal no longer operates at the facility. EPA may wish to consider initiating an investigation of the Industrial Highway facility.

- Information obtained by FIT 3 during interviews with property owners indicates that a former dump, which was utilized by Upper Southampton Township, exists 200 feet southeast of the subject site. EPA may wish to consider initiating an investigation of this dump.

The Plasti-Seal site is located in the northernmost area of Huntingdon Valley in Montgomery County, Pennsylvania. The site, approximately 200 by 200 feet in size, is located in the Huntingdon Valley Industrial Center on Republic Road. A residential area of Upper Southampton exists northeast of the site.

Since 1976, the company has operated at the site as a small-scale metal impregnation and pressure-testing facility. The site consists of 1 building that is approximately 100 by 100 feet in size. Inside the facility is a 450-gallon above-ground tank for 1,1,1-trichloroethane (1,1,1-TCEA) storage. Garage doors located at the building's northeastern corner are used to receive shipments of raw solvents and to send out shipments of waste solvents. The facility has not reported any spills. Approximately 200 gallons per month of 1,1,1-TCEA are used as degreasers at the facility. Sludge is collected from the bottom of two 55-gallon drums, which are used in degreasing metal parts. The sludge is reclaimed by Detrex Chemical, of Cinnaminson, New Jersey, every few months. Plasti-Seal is classified as a RCRA small-quantity generator of 1,1,1-TCEA. No other hazardous materials are utilized or generated at the facility.

In the late 1970s, three Upper Southampton public supply wells were found to be contaminated with TCE. Well no. 10, 2,000 feet northeast of the site, contained a TCE concentration of 44 ppb. The discovery of TCE in the wells prompted EPA to conduct an investigation in January 1980 to determine the source of the TCE contamination. Based on this investigation, one suspected source of contamination was the Plasti-Seal facility. To determine the extent of the contamination, EPA drilled five monitoring wells (one located on site) in January 1981. The source of the contamination was not identified.

Surface drainage from the site will flow along the paved driveway and onto Republic Road. Drainage will flow west of Republic Road and empty into a storm sewer. Water will flow to the west and to the southwest before discharging into an unnamed tributary to Southampton Creek. Access to the site is restricted by a six-feet-high chain-link fence north of the property line. There were no other access restrictions to the site.

Residents within the three-mile radius of the site obtain their water from eight public water systems, two private water systems, or domestic wells. Groundwater drawn from the study area serves a population of 109,735 persons. The nearest private home well to the site is approximately (b) (9) (b) (9) of the site.

On July 10, 1989, NUS FIT 3 conducted a site inspection at the site. The FIT obtained aqueous samples from monitoring wells on and near the site, a home well, and a tributary to Southampton Creek. Soil and sediments were collected on and near the site, and the unnamed tributary to the Southampton Creek was sampled.

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A TCE concentration of 76 ppb was discovered in the on-site well, monitoring well no. 1. There was no significant contamination detected in any soil, sediment, or surface water samples.

If you have any further questions, please contact me.

Respectfully submitted, Reviewed by, Approved by,

Not Responsive Due To Revised Scope

Project Manager Section Supervisor Regional Manager, FIT 3

BM/js

Attachments

DENTIAL

PRELIMINARY HRS SCORE

DATE 1/26/90

BASED ON: ☐ PA ☐ RECON. ☑ SI

ORIGINAL (Red)

FOR Plast. - Sol Inc

TDD F3-8906-08

EPA NO. PA-272

	S	S^2
Groundwater Route Score (S_{gw})	13.33	177.69
Surface Water Route Score (S_{sw})	4.85	23.52
Air Route Score (S_a)	0.00	0.00
$S_{gw}^2 + S_{sw}^2 + S_a^2$		201.21
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		14.18
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		8.20

NOTES:

DEFAULT VALUES:

(LIST THOSE FACTORS FOR WHICH DEFAULT VALUES WERE APPLIED)

Ground Water Route - total waste characteristics

Surface Water Route - total waste characteristics

PREPARED BY [redacted] Not Responsive Due To Revised Scope

REVIEWED BY [redacted] Not Responsive Due To Revised Scope

CONFIDENTIAL

PRELIMINARY HRS SCORE

DATE: [illegible]

BASED ON: ☐ PA ☐ RECON ☑ SI

FOR PLASTI-SEAL Inc

TDD F3 8906-08 EPA NO. PA-272

ORIGINAL (Red)

PFE

SOURCE

(UNKNOWN DATA MUST RECEIVE LOWEST NON-ZERO SCORE AND SOURCE SHOULD BE NOTED AS DEFAULT)

Ground-Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)	Source
1 Observed Release	0 45	1	0	45	3.1	IF SCORED COMPLETE BELOW
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.						
2 Route Characteristics					3.2	
Depth to Aquifer of Concern	0 1 2 (3)	2	6	6		(MW-1) 10' 11" static water level - S.I. 6/89 NUS FIT 3 [illegible]
Net Precipitation	0 1 (2) 3	1	2	3		43.55" precipitation; NOAA, Climatography of the U.S. No. 20, Climatological Standard of Phoenixville, PA 1951-1974
Permeability of the Unsaturated Zone	0 (1) 2 3	1	1	3		10^{-5} - 10^{-7} cm/sec U.S. Dept. of Ag; SCS, Soil Survey of Montgomery County, PA. April 1967
Physical State	0 1 2 (3)	1	3	3		450 gallon-above ground tank for TCEA storage. Degreasing in 55 gallon drums - Conversation w/ T. Bachecki and Raymond Keyser 8812-03 1/5/89
Total Route Characteristics Score			12	15		
3 Containment	0 (1) 2 3	1	1	3	3.3	55-gallon drums used for degreasing are in the facility on concrete. A 450-gallon above-ground tank for TCEA storage is in the facility.
4 Waste Characteristics					3.4	
Toxicity/Persistence	0 3 6 9 (12) 15 18	1	12	18		Conversation with Thomas Bachecki and Raymond Keyser - PA 1/5/89 8812-03 ↓ 1,1,1-TCEA - stored in 450 gal. tank inside facility
Hazardous Waste Quantity	0 (1) 2 3 4 5 6 7 8	1	1	8		unknown (default)
Total Waste Characteristics Score			13	26		
5 Targets					3.5	
Ground Water Use	0 1 2 (3)	3	9	9		Upper Southampton public supply well no. 10 NUS FIT 3, PA 1/5/89; 8812-03.
Distance to Nearest Well/Population Served	0 4 6 8 10 / 12 16 18 20 / 24 30 32 35 (40)	1	40	40		Upper Southampton public supply well 2000' NE NUS FIT 3, PA 1/5/89; 8812-03 Groundwater drawn from study area serves 109,735 NUS, FIT 3 Geo/Hydro Report
Total Targets Score			49	49		
6 If line 1 is 45, multiply 1 x 4 x 5. If line 1 is 0, multiply 2 x 3 x 4 x 5			7644	57,330		
7 Divide line 6 by 57,330 and multiply by 100	S_{gw} = 13.33					

NOTES

OBSERVED RELEASE

CONT	D.L.	WELL #	WELL #	WELL #	WELL #

SOURCE:

PREPARED BY Not Responsive Due To Revised Scope [redacted]

DATE 1/26/90

REVIEWED BY Not Responsive Due To Revised Scope [redacted]

DATE [illegible]

CONFIDENTIAL

PRELIMINARY HRS SCORE

DATE 1/26/90

BASED ON: ☐ PA ☐ RECON ☑ SI

FOR Plesh-Seal Inc

ORIGINAL (Red)

TDD F3-890608 EPA NO. PA-272

PFE

SOURCE

(UNKNOWN DATA MUST RECEIVE LOWEST NON-ZERO SCORE AND SOURCE SHOULD BE NOTED AS DEFAULT)

Surface Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	0 (1) 2 3	1	1	3	
1-yr. 24-hr. Rainfall	0 1 (2) 3	1	2	3	
Distance to Nearest Surface Water	0 1 (2) 3	2	4	6	
Physical State	0 1 2 (3)	1	3	3	
Total Route Characteristics Score			10	15	
3 Containment	0 1 2 (3)	1	3	3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 (12) 15 18	1	12	18	
Hazardous Waste Quantity	(0) 1 2 3 4 5 6 7 8	1	1	8	
Total Waste Characteristics Score			13	26	
5 Targets					4.5
Surface Water Use	0 1 (2) 3	3	6	9	
Distance to a Sensitive Environment	0 (1) 2 3	2	2	6	
Population Served/Distance to Water Intake Downstream	(0) 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
Total Targets Score			8	55	
6 If line 1 is 45, multiply 1 x 4 x 5			3120	94,350	
If line 1 is 0, multiply 2 x 3 x 4 x 5					
7 Divide line 6 by 94,350 and multiply by 100	S_{sw} = 4.85				

Site slope 3% USGS Topo Map - Intervening Terrain 3% Hatboro, PA

HRS Users Manual. One-41, 24-HR. Rainfall MAP 2.75" Figure 4, Page 13. (40CFR 300 (40FR 31214). July 16, 1982.

Unnamed tributary to Southampton Run then Pennypack Creek 1200 ft - USGS Topo Map - HATBORO, PA

1,1,1-TCEA; NUS PA 1/5/89 8812-03

Drums stored on concrete in building 8812-03

Conversation of Thomas Bachorchin and Raymond Kasper - PA 1/5/89, 8812-03 TCEA used for degreasing is kept in 55 gal. drums in the facility 1,1,1-TCEA is stored in a 450 gallon above-ground tank in the [illegible]

unknown (default)

PADER-WATER QUALITY STANDARDS Recreational - Pennypack Creek

-USFWS, National wetlands Inventory-HATBORO 7 acre wetland ½ mile downstream

NUS FIT 3, Geo/Hydro Report

NOTES

OBSERVED RELEASE

CONT.	DL.	SAMPLE #	SAMPLE #	SAMPLE #	SAMPLE #

SOURCE:

PREPARED BY [redacted]

DATE 1/26/90

REVIEWED BY [redacted]

DATE 1/26/90

Not Responsive Due To Revised Scope

Not Responsive Due To Revised Scope

CONFIDENTIAL

PRELIMINARY HRS SCORE

BASED ON: ☐ PA ☐ RECON. ☑ SI

FOR Plasti-Seal Inc.

TDD F3-8906-08 EPA NO. PA-272

ORIGINAL (Red)

PF

Air Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	5.1
Date and Location:					
Sampling Protocol:					
If line 1 is 0, the S_a = 0. Enter on line 5.					
If line 1 is 45, then proceed to line 2.					
2 Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				20	
3 Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
Total Targets Score				39	
4 Multiply 1 x 2 x 3				35,100	
5 Divide line 4 by 35,100 and multiply by 100	S_a =				

SOURCE

NOTE: NO POTENTIAL FOR RELEASE MAY BE SCORED. IF AN OBSERVED RELEASE IS SCORED, COMPLETE BELOW. UNKNOWN DATA FOR REMAINING FACTORS MUST RECEIVE THE LOWEST NON-ZERO SCORE AND SHOULD BE NOTED AS DEFAULT.

NOTES

OBSERVED RELEASE

CONT.	D.L.	WASTE SAMPLE	UPWIND #	DOWNWIND #

SOURCE: _____

PREPARED BY [redacted] Not Responsive Due To Revised Scope

DATE 1/26/90

REVIEWED BY [redacted] Not Responsive Due To Revised Scope

DATE 1/26/90

DENTIAL

PROJECTED HRS SCORE

DATE: 1/26/90

BASED ON: ☐ PA ☐ RECON. ☑ SI AND ASSUMPTIONS

ORIGINAL (Red)

FOR Plasti-Seal Inc.

TDD F3 8906-08

EPA NO. PA-272

PFE

	S	S^2
Groundwater Route Score (S_{gw})	13.33	177.69
Surface Water Route Score (S_{sw})	4.85	23.52
Air Route Score (S_a)	0.00	0.00
$S_{gw}^2 + S_{sw}^2 + S_a^2$		201.21
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		14.18
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M$		8.20

NOTES:

(POTENTIAL FOR AIR RELEASE)

TCEA is stored in a 450 gallon aboveground tank and in 55 gallon drums for degreasing metal parts. Although both forms of containment are in the facility, the potential still exists for air release via spills or replenishment of the tank.

HRS-2 CONCERNS:

AREA G.W. SUPPLIES CONTAMINATED ? yes; On-site well-1 was discovered to have a TCE concentration of 76 ppb. In addition, 3 public supply wells were shut-down following TCE discovery

S.W. INTAKES WITHIN 15 S.M. ? unknown, however no known surface intakes exist downstream in the study area.

RECREATION/SENSITIVE ENVIRONMENTS WITHIN 15 S.M. ? yes; A seven acre wetland is located ½ mile downstream from the site

CONTAMINATED SURFACE SOILS ACCESSIBLE ? NO

PREPARED BY [redacted] Not Responsive Due To Revised Scope

REVIEWED BY [redacted] Not Responsive Due To Revised Scope

CONFIDENTIAL

PROJECTED HRS SCORE

DATE: 1/26/90

BASED ON: ☐ PA ☐ RECON ☑ SI AND ASSUMPTIONS

ORIGINAL (Red)

FOR Plasti-Seal Inc.

TDD F3-8406-08 EPA NO. 172

Ground Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	0	45	3.1
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 (3)	2	6	6	
Net Precipitation	0 1 (2) 3	1	2	3	
Permeability of the Unsaturated Zone	0 (1) 2 3	1	1	3	
Physical State	0 1 2 (3)	1	3	3	
Total Route Characteristics Score			12	15	
3 Containment	0 (1) 2 3	1	1	3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 (12) 15 18	1	12	18	
Hazardous Waste Quantity	0 (1) 2 3 4 5 6 7 8	1	1	8	
Total Waste Characteristics Score			13	26	
5 Targets					3.5
Ground Water Use	0 1 2 (3)	3	9	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 / 12 16 18 20 / 24 30 32 35 (40)	1	40	40	
Total Targets Score			49	49	
6 If line 1 is 45, multiply 1 x 4 x 5. If line 1 is 0, multiply 2 x 3 x 4 x 5			7644	57,330	
7 Divide line 6 by 57,330 and multiply by 100	S_{gw} = 13.33				

SOURCE/ASSUMPTION

(IDENTIFY SOURCE OF DOCUMENTATION, PROFESSIONAL JUDGMENT OR NOTE AS "SAME AS PRESCORE")

IF SCORED: ☐ PRESCORE ☐ SEE BELOW

see prescore sheets

" " "

" " "

" " "

" " "

" " "

" " "

NOTES

OBSERVED RELEASE

CONT	D.L.	WELL #____	WELL #____	WELL #____	WELL #____

SOURCE: ____________

PREPARED BY [redacted]

DATE 1/26/90

REVIEWED BY [redacted]

DATE 1/26/90

CONFIDENTIAL

PROJECTED HRS SCORE

DATE: 1/26/90

BASED ON: ☐ PA ☐ RECON ☑ SI AND ASSUMPTIONS

ORIGINAL (Red)

FOR Plasti-Seal Inc.

TDD F3 8906-08 EPA NO. 272

PFE

Surface Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	0 (1) 2 3	1	1	3	
1-yr. 24-hr. Rainfall	0 1 (2) 3	1	2	3	
Distance to Nearest Surface Water	0 1 (2) 3	2	4	6	
Physical State	0 1 2 (3)	1	3	3	
Total Route Characteristics Score			10	15	
3 Containment	0 1 2 (3)	1	3	3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 (12) 15 18	1	18	18	
Hazardous Waste Quantity	(0) 1 2 3 4 5 6 7 8	1	1	8	
Total Waste Characteristics Score			13	20	
5 Targets					4.5
Surface Water Use	0 1 (2) 3	3	6	9	
Distance to a Sensitive Environment	0 (1) 2 3	2	2	6	
Population Served/Distance to Water Intake Downstream	(0) 4 8 8 10 / 12 16 18 20 / 24 30 32 35 40	1	0	40	
Total Targets Score			8	55	
6 If line 1 is 45, multiply 2 x 4 x 5			3120	94 350	
If line 1 is 0, multiply 2 x 3 x 4 x 5					
Divide line 6 by 64,350 and multiply by 100			S_{sw} = 4.85		

SOURCE/ASSUMPTION

(IDENTIFY SOURCE OF DOCUMENTATION, PROFESSIONAL JUDGMENT OR NOTE AS "SAME AS PRESCORE")

IF SCORED: ☐ PRESCORE ☐ SEE BELOW

see prescore sheets

NOTES

OBSERVED RELEASE

CONT.	DL.	SAMPLE #	SAMPLE #	SAMPLE #	SAMPLE #

SOURCE:

PREPARED BY [redacted]

DATE 1/26/90

REVIEWED BY [redacted]

DATE 1/26/90

Not Responsive Due To Revised Scope

Not Responsive Due To Revised Scope

CONFIDENTIAL

PROJECTED HRS SCORE

DATE: 1/26/90

BASED ON: ☐ PA ☐ RECON. ☑ SI AND ASSUMPTIONS

FOR Plasti-Seal Inc.

ORIGINAL (Red) PFE

TDD F3 8906-08 EPA NO. 272

Air Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	5.1
Date and Location:					
Sampling Protocol:					

If line 1 is 0, the S_a = 0. Enter on line 3.
If line 1 is 45, then proceed to line 2.

2 Waste Characteristics				5.2
Reactivity and Incompatibility	0 1 2 3	1	3	
Toxicity	0 1 2 3	3	9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	8	
Total Waste Characteristics Score			20	
3 Targets				5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1	30	
Distance to Sensitive Environment	0 1 2 3	3	6	
Land Use	0 1 2 3	1	3	
Total Targets Score			39	
4 Multiply 1 x 2 x 3			35,100	

Divide line 4 by 35,100 and multiply by 100 S_a =

IF >0 SEE PRESCORE SHEETS FOR DOCUMENTATION

NO POTENTIAL FOR RELEASE IS EVALUATED. TRANSFER AIR SCORE FROM PRESCORE. IF AN AIR RELEASE IS LIKELY, COMMENT BELOW:

NOTES

PREPARED BY [redacted] Not Responsive Due To Revised Scope

DATE 1/26/90

REVIEWED BY [redacted] Not Responsive Due To Revised Scope

DATE 1/26/90